To: Koch, Kristine[Koch.Kristine@epa.gov]; Zhen, Davis[Zhen.Davis@epa.gov]; Grandinetti,

Cami[Grandinetti.Cami@epa.gov]

From: Fleming, Sheila

Sent: Thur 4/28/2016 1:00:10 AM

Subject: RE: DEQ Comments on Updated Portland Harbor FS

Thanks K. This comments seems to be coming out of left field at the 11th hour. Glad to hear that Burt thought that he put this issue to bed years ago.

Sheila Fleming, PE

Deputy Director, Office of Environmental Cleanup

US EPA Region 10

1200 Sixth Avenue, Suite 900, M/S ECL-120

Seattle, WA 98101-3140

Tel: 206-553-1417

fleming.sheila@epa.gov

From: Koch, Kristine

Sent: Wednesday, April 27, 2016 5:13 PM

To: Zhen, Davis <Zhen.Davis@epa.gov>; Grandinetti, Cami <Grandinetti.Cami@epa.gov>

Cc: Fleming, Sheila <fleming.sheila@epa.gov>

Subject: FW: DEQ Comments on Updated Portland Harbor FS

FYI...

Kristine Koch Remedial Project Manager USEPA, Office of Environmental Cleanup

U. S. Environmental Protection Agency Region 10 1200 Sixth Avenue, Suite 900, M/S ECL-122 Seattle, Washington 98101-3140 (206)553-6705 (206)553-8581 (fax) 1-800-424-4372 extension 6705 (M-F, 8-4 Pacific Time, only)

From: Shephard, Burt

Sent: Wednesday, April 27, 2016 4:42 PM **To:** Koch, Kristine < Koch. Kristine@epa.gov >

Subject: RE: DEQ Comments on Updated Portland Harbor FS

Kristine,

I'm around to help on comments. Have to admit I was surprised to read Matt's comments, I thought we had gotten past those issues years ago. The more things change

Best regards,

Burt Shephard Risk Evaluation Unit Office of Environmental Assessment (OEA-095) U.S. Environmental Protection Agency, Region 10 1200 6th Avenue Seattle, WA 98101

Telephone: (206) 553-6359

Fax: (206) 553-0119

e-mail: Shephard.Burt@epa.gov

"Facts are stubborn things, but statistics are more pliable"
- Mark Twain

From: Koch, Kristine

Sent: Wednesday, April 27, 2016 2:19 PM **To:** Shephard, Burt <<u>Shephard.Burt@epa.gov</u>>

Subject: RE: DEQ Comments on Updated Portland Harbor FS

Cami is about at her wits end and is willing to push back. I think we are good for now, but will likely need your support in responding to comments.

Kristine Koch Remedial Project Manager USEPA. Office of Environmental Cleanup

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From: Shephard, Burt

Sent: Wednesday, April 27, 2016 11:43 AM **To:** Koch, Kristine < Koch. Kristine@epa.gov >

Subject: RE: DEQ Comments on Updated Portland Harbor FS

Kristine,

No way am I going to respond to Matt's last couple of messages. Has ODEQ forgotten that one of the longstanding assumptions at Portland Harbor is that remediation of a subset of the full COC list is intended to reduce all COCs to acceptable concentrations? Also risk assessment vs. risk management decisions EPA routinely makes at sites regarding what gets remediated and why.

Let me know if you want to chat about this. I have no idea how hard ODEQ wants to push on this, but it can't hurt to have a response in our back pockets.

Best regards,

Burt Shephard Risk Evaluation Unit Office of Environmental Assessment (OEA-095) U.S. Environmental Protection Agency, Region 10 1200 6th Avenue Seattle, WA 98101

Telephone: (206) 553-6359

Fax: (206) 553-0119

e-mail: Shephard.Burt@epa.gov

"Facts are stubborn things, but statistics are more pliable"

- Mark Twain

From: Koch, Kristine

Sent: Wednesday, April 27, 2016 11:25 AM **To:** Shephard, Burt Shephard.Burt@epa.gov>

Subject: FW: DEQ Comments on Updated Portland Harbor FS

Burt, Please don't respond to Matt et al on this. If you have something you want to provide to me, then let me know. Thanks,

Kristine Koch Remedial Project Manager USEPA, Office of Environmental Cleanup

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(206)553-6705 (206)553-8581 (fax) 1-800-424-4372 extension 6705 (M-F, 8-4 Pacific Time, only)

From: MCCLINCY Matt [mailto:MCCLINCY.Matt@deq.state.or.us]

Sent: Tuesday, April 26, 2016 2:55 PM

To: Koch, Kristine < Koch. Kristine @epa.gov>

Cc: Zhen, Davis <<u>Zhen.Davis@epa.gov</u>>; PARRETT Kevin <<u>Parrett.Kevin@deq.state.or.us</u>>;

Shephard, Burt \leq Shephard.Burt@epa.gov>; PETERSON Jenn L

<PETERSON.Jenn@deq.state.or.us>; GREENFIELD Sarah

<Greenfield.Sarah@deq.state.or.us>; ROICK Tom <ROICK.Tom@deq.state.or.us>

Subject: RE: DEQ Comments on Updated Portland Harbor FS

Kristine,

I think the issue is that we don't believe Table 2.2-2 accurately reflects the BERA findings and conclusions related to sediment concentrations associated with site-specific benthic toxicity. Sediment quality values (SQVs) from site specific benthic models in the BERA identify the COCs that are ecologically significant. However, not all of these are carried forward in Table 2.2-2. The BERA did not evaluate the validity of using a truncated list of model COCs in achieving protective levels.

This is an important issue to DEQ. I know that you and your team are scrambling, but I would like to find time to discuss it. If not before May 11th, I would propose we add it to the monthly coordination meeting agenda.

Matt

From: Koch, Kristine [mailto:Koch.Kristine@epa.gov]

Sent: Monday, April 25, 2016 10:44 AM

To: MCCLINCY Matt

Cc: Zhen, Davis; PARRETT Kevin; Shephard, Burt; PETERSON Jenn L; GREENFIELD Sarah; ROICK

Tom

Subject: RE: DEQ Comments on Updated Portland Harbor FS

Matt – Table 2.2-2 describes the selection of COCs. Only the COCs that are carried forward is EPA taking action on, therefore, we are only developing cleanup numbers for those COCs. There may be toxicity from other chemicals in the river, but EPA is not taking an action on those. This list is consistent with the findings and conclusions in the BERA. Bioassays are not acceptable cleanup goals, but can be used in monitoring the site. We can include collection of bioassays in the monitoring plan.

Kristine Koch Remedial Project Manager USEPA, Office of Environmental Cleanup

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(206)553-6705 (206)553-8581 (fax) 1-800-424-4372 extension 6705 (M-F, 8-4 Pacific Time, only)

From: MCCLINCY Matt [mailto:MCCLINCY.Matt@deq.state.or.us]

Sent: Monday, April 25, 2016 10:27 AM

To: Koch, Kristine < Koch.Kristine@epa.gov >

Cc: Zhen, Davis <Zhen.Davis@epa.gov>; PARRETT Kevin <Parrett.Kevin@deq.state.or.us>;

Shephard, Burt <<u>Shephard.Burt@epa.gov</u>>; PETERSON Jenn L <<u>PETERSON.Jenn@deq.state.or.us</u>>; GREENFIELD Sarah

<Greenfield.Sarah@deq.state.or.us>; ROICK Tom <ROICK.Tom@deq.state.or.us>

Subject: DEQ Comments on Updated Portland Harbor FS

Hi Kristine,

DEQ is continuing our review of the updated FS and has the following comments.

RAO5, Benthic PRGs: The list of benthic PRGs is incomplete relative to the site wide list of contaminants of concern correlated with site wide benthic toxicity in the BERA, or sediment quality values (SQVs). The use of a truncated list of sediment SQVs shown to be correlated with toxicity increases the likelihood that toxicity will remain even if PRGs are achieved, and therefore precludes the use of sediment concentrations in demonstrating achievement of site wide acceptable benthic toxicity exposure levels. DEQ requests that EPA include the complete list of benthic toxicity SQVs as PRGs or demonstrate how the truncated list is correlated and protective of benthic toxicity. The full list of SQVs for the site specific models can be found in Tables 6-10 and 6-11 of the BERA. An initial review generally identifies HPAH, LPAH, chromium, silver, dibutyl phthalate, phenol, carbazole, and dibenzofuran as absent from the RAO5 PRG list.

In Table 2.2-8, EPA selected the lowest SQV from the two site specific models, the logistic regression model (LRM) and floating point model (FPM), and one consensus based national model using as probable effect concentrations (PECs). This approach is recommended only if the full list of site specific chemicals correlated with toxicity is used, as described above.

Please note that DEQ previously provided the following comment on EPA's 2015 FS.

Ecological PRGs, Benthic Toxicity. It is not clear how EPA arrived at the current list of PRGs in RAO 5. Table 2.2-1 appears to be a reduced list of potentially significant risk drivers for benthic toxicity. The BERA does not include a list of ecologically significant chemicals related to benthic risk, and instead lists toxicity test results as the measure of significance ("risks to benthic invertebrates clustered in 17 benthic AOCs"). Dropping numeric PRGs that would provide strong lines of evidence related to benthic toxicity is problematic in ensuring protectiveness for benthic toxicity, particularly in the absence of bioassay toxicity criteria PRGs. DEQ requests that bioassay tests, along with a definition of acceptable risk, be included in the PRG table and that relevant sediment quality guidelines be used as a secondary line of evidence.

Matt McClincy

Oregon Department of Environmental Quality

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